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| EXAMINER |
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GHOWRWAL, OMAR J

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| ART UNIT | PAPER NUMBER |
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2463

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06/28/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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|------------------------------|--------------------------------------|---------------------------------------|--|
| Office Action Summary | Application No. 10/594,456 | Applicant(s) MAJIMA, TAICHI | |
| | Examiner OMAR GHOWRWAL | Art Unit 2463 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Remarks

1. This Office action is considered fully responsive to the amendment filed 4/7/10.
2. The rejection under U.S.C. 112 has been upheld. Again, the Examiner respectfully disagrees with Applicant's assertion that "uttered" and "unuttered" corresponds with "sonant" and "silent" from the instant specification. According to MPEP 2106, any special meaning assigned to a term "must be sufficiently clear in the specification that any departure from common usage would be so understood by a person of experience in the field of the invention." *Multiform Desiccants Inc. v. Medzam Ltd.*, 133 F.3d 1473, 1477 45 USPQ2d 1429, 1432 (Fed. Cir. 1998). See also MPEP § 2111.01. If the applicant asserts that a term has a meaning that conflicts with the term's art accepted meaning, USPTO personnel should encourage the applicant to amend the claim to better reflect what applicant intends to claim as the invention.

In this case, it is not clear that "sonant" and "silent" refer to "uttered" and "unuttered", as one of ordinary skill in the art could easily construe "unuttered" to mean the volume may simply be under a reference level as mentioned in the prior Office action. The Examiner suggests Applicant amends the terms "uttered" and "unuttered" to read as "sonant" and "silent" respectfully.

3. The objection to claim 12 is upheld since it was not addressed or amended by Applicant.

Response to Arguments

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4. Applicant's arguments filed 4/7/10 have been fully considered but they are not persuasive. The same prior art has been kept, see the rejection below pertaining how the prior art reads on the amendments.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. **Claim 11** is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The terms “uttered” and “unuttered” are not mentioned anywhere in the specification. For example, page 10, lines 24-30 of the instant specification mention encoding “sonant” or “silent” voice data, and “silent” voice data doesn’t necessarily mean a voice is “unuttered” as the volume may simply be under a reference level.

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. **Claim 11** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In particular, the new amendment to the claim mentions “reproducing voice data for voice data sections and reproducing silence for sections of the data of identifying the group, in such a way that if it is identified by the steal flag that all the N frames of voice data are sonant audio, the N frames of voice data are sequentially outputted, and if it is identified by the steal flag that at least one of the N frames of voice data is data of identifying the group are individually decided, and each of frames of valid voice data is outputted while performing predetermined protocol processing on the basis of valid group identifying data”, of which the underlined portion does not make sense as it is unclear as to what the frames are “individually decided” as.

Claim Objections

9. **Claims 11, 13, and 14** are objected to because of the following informalities: the final instance of the word “and” in these claims should be deleted. Appropriate correction is required.

10. **Claim 12** is objected to because of the following informalities: “the step setting” should be “the step of setting”. Appropriate correction is required.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. **Claims 11-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/27745 *JOHNSON et al.* (“*JOHNSON*”) in view of U.S. Patent No. 2005/0250534

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A1 to *Maurer et al.* ("*Maurer*") and in further view of U.S. Publication No. 2005/0080870

A1 to *Marks et al.* ("*Marks*").

As to **claim 11**, *JOHNSON* discloses a communication method used in a group call communication in which communication is performed among a plurality of members belonging to a predetermined group (see fig. 3, communication between different devices), the method comprising the steps of:

at a transmitting end,

encoding and framing an uttered section of an inputted analog voice signal to generate frames of voice data (page 9, lines 3-15, speech coder replaces non voice times with SID frames);

sequentially inputting frames of the generated voice data, and discriminating in a unit of frame which of sonant audio or silent audio is indicated by the inputted voice data (page 9, lines 3-15 whenever a voice activity detector VAD determines that voice is no longer active, a transmitter may enter DTX mode, and it ceases to transmit in every one of its assigned timeslots, however it transmits the voice data otherwise, where data is transmitted as voice frames or SID frames);

setting a steal flag of identifying whether or not all of a predetermined number N of continuous frames of voice data are sonant audio (page 5, lines 11-20, flag F1 shows presence of speech data);

replacing the voice data which is discriminated that it indicates silent voice with silence descriptor "SID" frames (page 9, lines 7-10);

and performing wireless transmission of SID frames, and voice data indicating voice and the steal flag, at a transmitting end (page 5, lines 11-20, flag F1 shows presence of speech data; page 9, lines 3-31, DTX periods and non-DTX periods are transitioned between each other when a speech frame and SID frames are transmitted with each other; hence voice is transmitted w/ a steal flag and SID frames are transmitted separately).

and at a receiving end, receiving a signal which has been wirelessly transmitted (page 9, lines 14-31);

discriminating the voice data, the SID frames and a content of the steal flag (page 9, lines 14-31, DTX vs. non DTX periods; page 5, lines 11-20, flag F1 shows presence of speech data);

determining how the received signal is to be reproduced, on the basis of the SID frames and the discriminated content of the steal flag (page 9, lines 14-31, depending on the state is a DTX period, "comfort noise" or voice is played, i.e. when not in DTX, regular voice with the steal flag is received);

and reproducing voice data for voice data sections and reproducing silence for sections of the SID frames (page 9, lines 14-31, depending on period, "comfort noise" (no voice) based on silence descriptor or voice is played).

JOHNSON does not expressly disclose encoding and framing *the whole* of an inputted analog voice signal *regardless whether the signal is in an uttered section or an unuttered section* to generate voice data; replacing the voice data which is discriminated that it indicates silent voice with *data identifying of the group*, performing wireless

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transmission of the replaced data of identifying the group *together* with voice data indicating voice and the steal flag, *in such a way that if it is identified by the steal flag that all the N frames of voice data are sonant audio, the N frames of voice data are sequentially outputted, and if it is identified by the steal flag that at least one of the N frames of voice data is data of identifying the group are individually decided, and each of frames of valid voice data is outputted while performing predetermined protocol processing on the basis of valid group identifying data.*

Maurer discloses voice and non-voice data are marked with a flag, para. 0036, and are transmitted con-currently para. 0038, and they are individually decoded and outputted to display a picture during a voice conversation, abstract.

JOHNSON and *Mauer* are analogous art because they are from the same field of endeavor with regards to data processing.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to incorporate the data transmissions as taught by *Mauer* into the invention of *JOHNSON*. The suggestion/motivation would have been to send data and voice from a cellular phone to another phone during the same phone call (*Mauer*, para. 0017).

Marks discloses one or more header fields in requests from a client may be replaced by a group header identifier (para. 0006).

JOHNSON, *Mauer* and *Marks* are analogous art because they are from the same field of endeavor with regards to data processing.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to incorporate the replacing header fields with a group header identifier as taught by Marks into the invention of JOHNSON and *Mauer*. The suggestion/motivation would have been to reduce overhead of the messages transmitted (Marks, para. 0006).

As to claim 12, *JOHNSON*, *Mauer* and *Marks* further disclose the communication method according to claim 11, wherein the transmitting end further comprises a step of forming a transmission frame from the voice data and the replaced data of identifying the group (*JOHNSON*, figs. 2, 5, speech is transmitted in frames, Marks, para. 0006, group identification in header, i.e. a frame with a header), the step setting a steal flag which shows the presence of the voice data at the time of transmission (*JOHNSON*, page 5, lines 11-20, flag F1 shows presence of speech data);

and wherein the receiving end further comprises a step of discriminating the presence of the replaced data of identifying the group on the basis of the steal flag in the received signal (*JOHNSON*, page 6, lines 14-15, steal flag F1 utilized in determining whether a given received frame contains speech, i.e. if it is present, there is not any silent data (data identifying group of Marks)). In addition, the same suggestion/motivation of claim 11 applies.

As to **claim 13**, *JOHNSON* discloses a receiving method used in a group call communication in which communication is performed among a plurality of members belonging to a predetermined group (see fig. 3, communication between different devices), the method comprising the steps of:

receiving by a reception unit a wireless transmitted signal including voice data of representing voice, and a steal flag of identifying whether or not all of a predetermined number N of continuous frames of voice data are sonant audio, FACCH identifying signal voice data indicative of silence (figs. 2, 5, page 6, lines 11-14, grouped frames FR within multiframe MF2 can contain either speech or control signals, page 2, lines 23-25 as is understood in the art FACCH control signals cause a speech decoder to mute, i.e. transmitter constructs multiframe MF1 to be made up of speech frames, but some of them are silent, page 6, lines 14-15, steal flag F1 utilized in determining whether a given received frame contains speech);

discriminating by a reception unit the voice data, the FACCH and a content of the steal flag in the received signal (fig. 2, 5, receiver detects speech frames from FACCH frames (MF2-MF3), page 6, lines 14-15, steal flag F1 utilized in determining whether a given received frame contains speech);

determining by a reception unit how the received signal is to be reproduced, on the basis of the FACCH and the content of the steal flag (fig. 2, 5, receiver detects speech frames from FACCH frames, reproduces the data in MF3 (page 6, lines 14-15, steal flag F1 utilized in determining whether a given received frame contains speech));

and reproducing voice data for voice data sections and reproducing silence for sections of the FACCH, by using a reproduction unit (fig. 2, 5, receiver detects speech frames from FACCH frames, reproduces the data in MF3, page 2, lines 23-25 as is understood in the art FACCH control signals cause a speech decoder to mute)

JOHNSON does not expressly disclose receiving by a reception unit a wireless transmitted signal including *data identifying the group*, replacing the voice data which is discriminated that it indicates silent voice with *data identifying of the group*.

in such a way that if it is identified by the steal flag that all the N frames of voice data are sonant audio, the N frames of voice data are sequentially outputted and if it is identified by the steal flag that at least one of the N frames of voice data is data identifying the group, validity of the voice data and data identifying the group are individually decided, and each of frames of valid voice data is outputted while performing predetermined protocol processing on the basis of valid group identifying data.

Maurer discloses voice and non-voice data are marked with a flag, para. 0036, and are transmitted con-currently para. 0038, and they are individually decoded and outputted to display a picture during a voice conversation, abstract.

JOHNSON and *Mauer* are analogous art because they are from the same field of endeavor with regards to data processing.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to incorporate the data transmissions as taught by *Mauer* into the invention of *JOHNSON*. The suggestion/motivation would have been to send data and voice from a cellular phone to another phone during the same phone call (*Mauer*, para. 0017).

Marks discloses one or more header fields in requests from a client may be replaced by a group header identifier (para. 0006).

JOHNSON, Mauer and Marks are analogous art because they are from the same field of endeavor with regards to data processing.

At the time of invention, it would have been obvious to a person of ordinary skill in the art to incorporate the replacing header fields with a group header identifier as taught by Marks into the invention of JOHNSON and Mauer. The suggestion/motivation would have been to reduce overhead of the messages transmitted (Marks, para. 0006).

As to **claim 14**, see similar rejection for **claim 13**. The method teaches the apparatus.

As to claim 15, *JOHNSON, Mauer and Marks* further discloses the receiving apparatus according to claim 14, wherein the reception means operates so as to receive a frame signal (JOHNSON, fig. 2, 5 multiframe);

wherein the detection means operates so as to detect predetermined data in a voice signal included in the frame signal (JOHNSON, fig. 2, 5, detecting speech frames);

wherein the reproduction means operates so as to reproduce the voice signal in the frame signal which is received by the reception means (JOHNSON, fig. 2, 5, reproducing speech frames in MF3), and further to reproduce the predetermined voice when data of identifying the group data is detected by the detection means (JOHNSON, fig. 2, 5, reproducing speech frames and FACCH frames in MF3, i.e. using group identifier of Marks for FACCH);

and wherein the control means operates to execute processing based on the data of identifying the group detected by the detection means (Marks, para. 0006,

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requests processed based upon the respective group header identifiers). In addition, the suggestion/motivation would have been to reduce the overhead of messages transmitted (Marks, para. 0006).

As to claim 16, *JOHNSON, Mauer and Marks* further discloses the receiving apparatus according to claim 15, wherein a predetermined control flag which shows the presence of the data of identifying the group is set in the frame signal (*JOHNSON*, page 5, lines 11-20, flags F1 and F2 distinguish speech from FACCH, i.e. using group identifier of Marks for FACCH);

and wherein the detection means operates so as to detect the data of identifying the group on the basis of the predetermined control flag (*JOHNSON*, page 6, lines 14-15, flags F1 and F2 are utilized in determining whether a given received frame contains speech or FACCH, i.e. using group identifier of Marks for FACCH). In addition, the suggestion/motivation of claim 15 applies.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the

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shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OMAR GHOWRWAL whose telephone number is (571)270-5691. The examiner can normally be reached on M-Th 10a.m.-8:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derrick Ferris can be reached on (571)272-3123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/O. G./

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/Derrick W Ferris/

Supervisory Patent Examiner, Art Unit 2463